REMARKS

Applicants thank the Examiner for acknowledging Applicants' claim to foreign priority, and for indicating that the certified copy of the priority document, French Patent Application No. 9810131 dated August 6, 1998, has been made of record in the file.

Applicants thank the Examiner for initialing the references listed on the PTO-1449 form submitted with the Information Disclosure Statement filed on July 30, 1999, thereby confirming that the listed references have been considered.

The Official Draftsperson objects to the Formal Drawings as filed. Applicants are filing a Submission of Corrected Drawings concurrently with this Amendment to overcome the Official Draftsperson's objection.

Applicants herein amend claims 1-8. The amendments to claims 1-8 remove "step" language and correct minor grammatical errors. Applicants submit that the amendments to claims 1-8 were made merely to more accurately claim the present invention and do not narrow the literal scope of the claims as originally filed. In addition, the amendments to claims 1-8 were not made for reasons of patentability.

Applicants herein add new claims 8-16. Support for new claims 8 and 9 can be found, for example on page 13 of the specification. Support for new claims 10-16 can be found, for example, in the original claims and in Figures 1 and 2. Entry and consideration of the new claims is respectfully requested.

The Examiner objects to claims 3 and 7 as being dependent upon a rejected base claim. Applicants thank the Examiner for indicating that claims 3 and 7 would be allowed if rewritten in

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independent form. However, instead of rewriting claims 3 and 7 in independent form, Applicants

respectfully traverse the prior art rejections for the reasons set forth below.

Claims 1-16 are all the claims presently pending in the application.

1.   Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over

Ravishankar et al. (U.S. Patent No. 6,226,304) in view of Kawashima et al. (U.S. Patent No.

5,894,588). Applicants traverse the rejection of claims 1 and 2 for at least the reasons set forth

below.

The Examiner acknowledges that Ravishankar et al. fails to teach or suggest a method

comprising at least two routing calculations, wherein one calculation uses less than a given number

of compressed links, and a second uses the given number of compressed links as well as information

from the first calculation. *See* October 22, 2002 Office Action, page 2, numbered paragraph 2. The

Examiner attempts to overcome the acknowledged deficiencies of Ravishankar et al. by combining

Ravishankar et al. with Kawashima et al.

Kawashima et al. discloses, *inter alia*, a method and apparatus for calculating an estimated

compression ratio. *See* Fig. 16; col. 34, line 55 to col. 36, line 8 of Kawashima et al. Several

kilobytes of data are compressed in order to determine an estimated compression ratio.

The initial burden of establishing that a claimed invention is *prima facie* obvious rests on the

USPTO. *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). To make its *prima facie* case of

obviousness, the USPTO must satisfy three requirements:

1. The prior art relied upon, coupled with the knowledge generally available in the art at the

time of the invention, must contain some suggestion or incentive that would have motivated to artisan to modify a reference or to combine references. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988).

2. The proposed modification of the prior art must have had a reasonable expectation of success, and that determined from the vantage point of the artisan at the time the invention was made. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209 (Fed. Cir. 1991).

3. The prior art reference or combination of references must teach or suggest all the limitations of the claims. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, the nature of a problem to be solved. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Alternatively, the motivation may be implicit from the prior art as a whole, rather than expressly stated. *Id.* Regardless if the USPTO relies on an express or an implicit showing of motivation, the USPTO is obligated to provide particular findings related to its conclusion, and those findings must be clear and particular. *Id.* A broad conclusionary statement, standing alone without support, is not "evidence." *Id.; see also, In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

In addition, a rejection cannot be predicated on the mere identification of individual components of claimed limitations. *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the

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claimed invention, would have selected these components for combination in the manner claimed.
Id.

The combination of Ravishankar et al. and Kawashima et al. fails to teach or suggest the routing calculations as recited in claim 1. The Examiner has acknowledged that the disclosure of Ravishankar et al. fails to teach or suggest this feature of the recited invention. Kawashima et al., when combined with Ravishankar et al., fail to teach or suggest this feature as well. Kawashima et al. disclose a multi-pass data compression technique that is used to determine an estimated compression ratio of a given data file (or files). *See* col. 35, line 61 to col. 36, line 2 of Kawashima et al. Although Kawashima et al. do discuss data transmission, Kawashima et al. teach compressing data and forwarding it to a data destination based on a comparison between actual and preset compression ratios. *See* Abstract of Kawashima et al. There is no teaching or suggestion of making a routing determination between nodes in a computer network based on whether the links between the nodes use compression. The data being sent by Kawashima et al.'s device compresses data before sending it to its destination. Thus, the combination of Ravishankar et al. and Kawashima et al. makes no examination of whether the data paths use compression or not prior to making a routing decision. Applicants believe that the Examiner has not met the "all limitations" prong of a *prima facie* case of obviousness, and request that the Examiner withdraw the § 103(a) rejection with respect to claim 1.

Applicants further believe that the Examiner has not met the motivation prong of a *prima facie* case of obviousness as well. The disclosure of Kawashima et al. is directed to compressing data prior to its transmission to a particular destination. Kawashima et al. is silent with respect to any

methods for determining the routing of data through a network that contains non-compressed and compressed links, as recited in claim 1. Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 208 USPQ 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *In re Geiger*, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987), *citing ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 USPQ 929, 933 (Fed. Cir. 1984). And "teachings of references can be combined only if there is some suggestion or incentive to do so." *Id.* Here, Kawashima et al. contain no teaching whatsoever of route calculations across compressed and uncompressed links between nodes in a network. Under *Dembiczak*, the Examiner is obligated to provide clear and particular findings of motivation. However, on page 3 of the October 22, 2002 Office Action, the Examiner describes a data compression process and then concludes that it would have been obvious to use this compression technique in combination with Ravishankar et al. However, nowhere in the reasoning provided by the Examiner is any mention of routing calculations remotely similar to the routing calculations recited in claim 1. Thus, Applicants believe that the Examiner has failed to provide clear and particular findings of motivation as required by *Dembiczak* and *Zurko*, and has not met the motivation prong of a *prima facie* case of obviousness. Applicants request that the Examiner withdraw the § 103(a) rejection with respect to claim 1.

With respect to claim 2, Applicants believe that this claim is allowable as well, at least by virtue of its dependency from claim 1.

With respect to new claims 10 and 11, these new claims have recitations that are similar to claims 1 and 2. Applicants believe that new claim 10 is allowable for at least the same reasons as claim 1, and that new claim 11 is allowable at least by virtue of its dependency from claim 10.

2. Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ravishankar et al. in view of Kawashima et al. and in further view of Regnier (U.S. Patent No. 5,930,348). Applicants traverse the rejection of claims 5 and 6 for at least the reasons set forth below.

Claims 5 and 6 depend from claim 1, and therefore include all the recitations of claim 1 by virtue of their dependency from claim 1.

The Examiner acknowledges that the combination of Ravishankar et al. and Kawashima et al. fails to teach or suggest a network as recited in claim 1 that further comprises overflow links to an external network and the routing calculations include calculations for the overflow links. *See* October 22, 2002 Office Action, page 3, numbered paragraph 3.

The combination of Ravishankar et al., Kawashima et al. and Regnier fails to teach or suggest the invention as recited in claims 5 and 6. While Regnier discloses checking alternate links for overflowing calls, there is no teaching or suggestion in the combination of overflow routing calculations for a given number of overflows and for a given number of compressions, wherein the overflow routing calculations comprise a first overflow routing calculation for a number of overflows less than the given number, and a second overflow routing calculation for a number of overflows and a given number of compressions using information obtained from the first overflow

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routing calculation, as recited in claim 5. As noted above, there is no teaching or suggestion in the combination of Ravishankar et al. and Kawashima et al. of routing calculations based on compressed and uncompressed links in a computer network, and Regnier does not provide any such teaching as well. Thus, Applicants request that the Examiner withdraw the § 103(a) rejection with respect to claims 5 and 6.

With respect to new claims 14 and 15, these new claims have recitations that are similar to claims 5 and 6. Applicants believe that new claims 14 and 15 are allowable for at least the same reasons as claims 5 and 6.

3.   Claim 4 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ravishankar et al. in view of Kawashima et al. and in further view of Lee (U.S. Patent No. 6,122,283). Applicants traverse the rejection of claim 4 for at least the reasons set forth below.

Claim 4 depends from claim 1, and therefore includes all the recitations of claim 1 by virtue of its dependency from claim 1.

The Examiner acknowledges that the combination of Ravishankar et al. and Kawashima et al. fails to teach or suggest a network as recited in claim 1, wherein the routing calculation for a given number of compressions uses the Dijkstra algorithm and verifies the number of compressions when adding a node to the route. *See* October 22, 2002 Office Action, page 5, numbered paragraph 4.

The combination of Ravishankar et al., Kawashima et al. and Lee fails to teach or suggest the invention as recited in claim 4. While Lee discloses the use of the Dijkstra algorithm, it does not

teach or suggest routing calculations for a network composed of compressed and uncompressed links, as recited in claim 4. As noted above, there is no teaching or suggestion in the combination of Ravishankar et al. and Kawashima et al. of routing calculations based on compressed and uncompressed links in a computer network, and Lee fails to provide any such teaching as well. Thus, Applicants request that the Examiner withdraw the § 103(a) rejection with respect to claim 4.
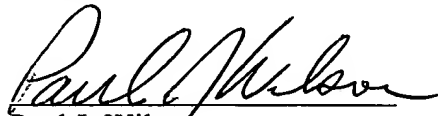
With respect to new claim 13, this new claim has recitations that are similar to claim 4. Applicants believe that new claim 13 is allowable for at least the same reasons as claim 4.

In view of the above, reconsideration and allowance of this application are now believed to

be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner

feels may be best resolved through a personal or telephone interview, the Examiner is kindly

requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee

and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to

said Deposit Account.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1.[-] (*Amended*) A method of routing between a source node and a destination node in a network having nodes connected by links, wherein compression is [being] used on at least one of said links, wherein the method comprises: [comprising]

performing at least two routing calculations [calculation steps] for a given number of compressions, said routing calculations comprising a first routing calculation for a number of compressions less than said given number, and a second routing calculation [step] for a given number of compressions using information obtained from the first [during a] routing calculation [step for a number of compressions less than said given number].

2.[-] (*Amended*) The [A] method according to claim 1, wherein the method further comprises [comprising] choosing a cost function and wherein the routing calculations minimize [calculation minimizes] the cost function.

3.[-] (*Amended*) The [A] method according to claim 1, wherein a routing calculation [step] for a given number of compressions comprises, at a node where the number of compressions from the source node is equal to the given number, seeking and saving for a subsequent routing calculation [step] adjacent links on which compression is used.

4.[-] (*Amended*) The [A] method according to claim 1, wherein a routing calculation [step] for a given number of compressions uses the Dijkstra algorithm and verifies the number of compressions when adding a node to the route.

5.[-] (*Amended*) The [A] method according to claim 1, wherein the network further comprises overflow links to an external network, said method further [and wherein the method] comprises at least two overflow routing calculations [calculation steps] for a given number of overflows and for a given number of compressions, said overflow routing calculations comprising a first overflow routing calculation for a number of overflows less than said given number, and a second overflow routing calculation [step] for a number of overflows and a given number of compressions using information obtained from said first overflow [during a] routing calculation [step for a number of overflows less than said given number of overflows].

6.[-] (*Amended*) The [A] method according to claim 5, wherein the method further comprises [comprising] choosing a cost function representative of the cost of overflows and wherein the routing calculations minimize [calculation minimizes] the cost function.

7.[-] (*Amended*) The [A] method according to claim 5, wherein the routing calculations [calculation steps] are effected for a given number of overflows by varying the number of compressions and then by varying the number of overflows.

Claims 8-16 are added as new claims.